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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,410	06/08/2001	LuJack Ewell	06933.105005	7703

7590 01/07/2005

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EXAMINER

CHOU, ALBERT T

ART UNIT PAPER NUMBER

2662

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,410

Applicant(s)

EWELL ET AL.

Examiner

Albert T. Chou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06-08-2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 ~~1-14 and 30-33~~ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-29 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-14, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 4, 9, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. Figure 1A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-8, 10-14, 32 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaplan et al. (US Patent Number: 6,680,904) hereinafter referred to as Kaplan.

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4. Regarding claims 1 and 6, Kaplan teaches an access system (figure 3; col. 6, lines 11-20), such as DSLAM, which provides subscriber access (a telecommunication services interface) to an ATM network (operable to process WAN communication service signals), comprising a **Master 30** (a master unit, coupled to a WAN) connecting to a **Slave 34** and a **Standby Master 32** (with a fixed number of telecommunication service interfaces at the master unit), and a **Slave 34** (an expansion unit) (figure 3; col. 6, lines 25-30), which is connected to the **Master 30** by **Lines 38** (coupled via an expansion line to the master unit) and is linked to a daisy-chained slaves (comprising an expansion set of telecommunication services), receives the downstream traffic from the **Master 30** (col. 6, lines 38-43) (the expansion unit operable to receive the service signals in the downstream direction from the master unit via the expansion link) and routes upstream traffic to the **Master 30** (the expansion unit operable to transmit signals in the upstream direction via the expansion link to the master unit).

5. Regarding claim 2, Kaplan teaches that (figures 3-4; col. 6, lines 25-30) a plurality of **Slaves 34** (a second expansion unit comprising a second expansion set of service interfaces) are connected to the **Master 30** by **Lines 38** in a daisy chain **36** (a second expansion unit operable to transmit signals in the upstream direction via the expansion link and to receive the service signals in the downstream direction from the master unit via the expansion link).

6. Regarding claim 3, Kaplan teaches a plurality of **Slaves 34** (figures 3-4; col. 6, lines 25-30) are connected to the **Master 30** by **Lines 38** in a daisy chains

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36 (the expansion link comprises a flexible cable supporting a serial communications interface).

7. Regarding claim 5, Kaplan teaches that the **Master 30** provides subscriber access to an ATM network (col. 6, lines 11-20). Kaplan also teaches that (figures 3-4; col. 6, lines 25-30) a plurality number of **Slaves 34** (a plurality of remote ATM-compatible interfaces) are connected to the **Master 30** by **Lines 38** and receive/transmit traffic from/to the **Master 30** through a first physical interface **PHY 40** (figure 4, col. 7, lines 28-31) (input expansion port operable for coupling to the master unit). In addition, a plurality of **Slaves 34** also receive/transmit traffic from/to the next slave in the chain through a second physical interface **PHY 52** (figure 4, col. 7, lines 41-67) (output expansion port operable for coupling to another expansion unit).

8. Regarding claim 7, Kaplan teaches an access system (figure 3; col. 6, lines 11-20), such as DSLAM, which provides subscriber access (a telecommunication services interface) to an ATM network (operable to process WAN communication service signals), comprising a **Master 30** (a master unit, coupled to a WAN) connecting to a **Slave 34** and a **Standby Master 32** (with a fixed number of telecommunication service interfaces at the master unit), and a **Slave 34** (an expansion unit) (figure 3; col. 6, lines 25-30), which is connected to the **Master 30** by **Lines 38** (coupled via an expansion line to the master unit) and is linked to a daisy-chained slaves (comprising an expansion set of telecommunication services), receives the downstream traffic from the **Master 30** (col. 6, lines 38-43) (the expansion unit operable to receive the service signals in

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the downstream direction from the master unit via the expansion link) and routes upstream traffic to the **Master 30** (the expansion unit operable to transmit signals in the upstream direction via the expansion link to the master unit). Kaplan further teaches (figure 3) a plurality of **Slaves 34** (figure 3; col. 6, lines 25-30) are connected to the **Master 30** by **Lines 38** in a daisy chain **36** (col. 6, lines 25-30) (a second expansion unit comprising a second expansion set of service interfaces and operable to transmit signals in the upstream direction via the expansion link and to receive the service signals in the downstream direction from the master unit via the expansion link).

9. Regarding claim 8, Kaplan teaches that the **Master 30** (figure 6) provides subscriber access to an ATM network (col. 6, lines 11-20) and interconnections to **Slaves 34, 36, 37, 39, Master 32** and ATM network through Ports 0 -5 (figure 3; col. 6, lines 25-30; figure 6; col. 8, line 53-64) (comprising a predetermined number of local ATM-compatible interfaces and an ATM controller function).

Kaplan also teaches that a plurality number of **Slaves** (an expansion function) (figures 3-4; col. 6, lines 25-30) are connected to the **Masters 30** by **Lines 38** and receive/transmit traffic from/to the **Master 30** through a first physical interface **PHY 40** (figure 4, col. 7, lines 28-31). In addition, a plurality of **Slaves 34** also receive/transmit traffic from/to the next slave in the chain through a second physical interface **PHY 52** (figure 4, col. 7, lines 41-67) (for communicating ATM cells via the expansion port and for the communicating the ATM cells with the local ATM-compatible interfaces).

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10. Regarding claim 10, Kaplan teaches that the controller function of the **Master 30** (figure 6; figure 3; col. 6, lines 11-20) provides subscriber access to an ATM network (an ATM controller function with an ATM network interface) and interconnections to **Slaves 34, 36, 37, 39, Master 32** and ATM network through Ports 0 -5 (figure 3; col. 6, lines 25-30; figure 6; col. 8, line 53-64) (comprising a predetermined number of local ATM-compatible interfaces and an ATM controller function). Kaplan also teaches that the controller function of the **Master 30** routes the received downstream traffic from ATM-compatible network (figure 3; col. 6, lines 38-43) to down chain **Slaves 36** and upstream traffic from the slaves is likewise routed up the chains to the **Master 30** (an ATM processor, responsive to the ATM cells received form the ATM network and the ATM cells received from the local ATM-compatible interfaces or expansion port). Kaplan further teaches a plurality number of **Slaves 34** (figure 3; col. 6, lines 25-30) are connected to the **Master 30** by **Lines 38** through a first physical interface **PHY 40** (figure 4, col. 7, lines 28-31) and a second physical interface **PHY 52** for the next slave in the chain (figure 4, col. 7, lines 41-67) (managing operations of the ATM controller and the expansion functions).

11. Regarding claim 11, Kaplan teaches (figure 3) a plurality of **Slaves 34** (figure 3; col. 6, lines 25-30) are connected to the **Masters 30** by **Lines 38** in a daisy chain **36** (the expansion port is coupled to an expansion unit via a flexible expansion link and the expansion unit is operable to expand the delivery of ATMT-compatible services to an additional set of subscribers).

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12. Regarding claim 12, Kaplan teaches (figures 3,4 and 6) the **Masters 30** and the **Slaves 34** comprise separate small assemblies and each is capable of installation in different locations within a cabinet.

13. Regarding claim 13, Kaplan teaches that (figures 3 & 6; col. 6, lines 38-43), under the normal system operation, downstream data packets from the network is routed to the **Master 30** down chain **36** to the respective **Slaves 34** *(the expansion units)* and that the upstream traffic from slaves is likewise routed up the chains to the **Master 30** *(a plurality of remote ATM-compatible interfaces for communicating ATM cells with the additional set of subscribers; an expansion port for coupling to the expansion link to establish a communication with the expansion port of the master unit)*. Kaplan further teaches (figure 3) a plurality of **Slaves 34** (figure 3; col. 6, lines 25-30) are connected to the **Master 30** by **Lines 38** in a daisy chain **36** *(an expansion unit for communicating the ATM cells in upstream and downstream directions via the expansion port and for communicating the ATM cells with the remote ATM-compatible interfaces)*.

14. Regarding claim 14, Kaplan teaches (figure 3) a plurality of **Slaves 34** *(the expansion unit)* are connected to the **Master 30** by **Lines 38** in a daisy chain **36** (figure 3; col. 6, lines 25-30) *(the expansion unit further comprises an output expansion port for connecting the expansion unit to another expansion unit via a second expansion link)*.

15. Regarding claims 32, Kaplan teaches that the **Master 30** (figure 6) provides subscriber access to an ATM network (col. 6, lines 11-20) and interconnections to **Slaves 34, 36, 37, 39, Master 32** and ATM network through

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Ports 0 -5 (figure 3; col. 6, lines 25-30; figure 6; col. 8, line 53-64) (comprising the fixed number of local ATM-compatible interfaces and an ATM controller function).

Kaplan also teaches that a plurality number of **Slaves 34** (an expansion function) (figures 3-4; col. 6, lines 25-30) are connected to the **Master 30** by **Lines 38** and receive/transmit traffic from/to the **Master 30** through a first physical interface **PHY 40** (figure 4, col. 7, lines 28-31). In addition, a plurality of **Slaves 34** also receive/transmit traffic from/to the next slave in the chain through a second physical interface **PHY 52** (figure 4, col. 7, lines 41-67) (an expansion function, coupled to the ATM-compatible interfaces and to an expansion port, for communicating the ATM cells via the expansion port and for communicating the ATM cells with the ATM-compatible interfaces).

16. Regarding claim 33, Kaplan teaches that (figures 3-4; col. 6, lines 25-30) a plurality number of **Slaves 34** (first expansion unit comprises the expansion set of ATM-compatible interfaces with an additional set of subscribers that are not served by the fixed number of ATM-compatible interfaces of the master unit) are connected to the **Master 30** by **Lines 38** in a daisy chain **36** (an expansion function coupled to the input expansion port and to the out put port). Kaplan also teaches (figure 4, col. 7, lines 28-31) that the first slave in the chain (the first expansion unit) of **Slaves 36** receives the downstream traffic from the **Master 30** and transmits upstream traffic to the **Master 30** through a first physical interface **PHY 40** (an input expansion port for coupling to the expansion link to establish a communication link with the expansion port of the master unit). Kaplan further teaches that (figure 4, col. 7, lines 41-67) the first slave in the chain of (the first

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expansion unit) of **Slaves 36** receives and transmits traffic from/to the next slave in the chain through a second physical interface **PHY 52** (an output expansion port for coupling the second expansion link to establish a communication link with the second expansion unit).

Allowable Subject Matter

17. Claims 4, 9, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claims 15-29 are allowed.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

Albert T. Chou

December 27, 2004



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